

IN THE SPECIFICATIONS

On page 1, please replace the paragraph on lines 3 - 10 with the following amended paragraph:

This application is a Divisional of United States Patent Application Ser. No. 10/121,375 filed on April 12, 2002 which is a divisional of 09/778,696 filed on February 6, 2001 (now United States Patent 6,531,694) which is a divisional of United States Patent application Ser. No. 09/071,764 filed on May 1, 1998 (the "Parent Application"), now United States Patent 6,281,489. The parent application claimed ~~This application claims~~ priority from Provisional United States Patent Applications Ser. Nos. 60/045,354 filed on May 2, 1997; 60/048,989 filed on June 9, 1997; 60/052,042 filed on July 9, 1997; 60/062,953 filed on October 10, 1997; 67/073425 filed on February 2, 1998; and 60/079,446 filed on March 26, 1998.

Reference is also made to a United States Patent Application entitled " Monitoring of Downhole Parameters and Tools Utilizing Fiber Optics " filed on the same date as the present application under Attorney Docket No. 414-9450 US, the contents of which are incorporated here by reference.

Please amend the paragraph starting on Page 13, line 4 and ending on Page 15, line 16 as indicated:

FIG. 1 shows a schematic illustration of an elevational view of a multi-lateral wellbore and placement of fiber optic sensors therein.

FIG. 1A shows the use of a robotic device for deployment of the fiber optic sensors.

FIG. 2 is a schematic illustration of a wellbore system wherein a fluid conduit along a string placed in the wellbore is utilized for activating a hydraulically-operated device and for deploying a fiber optic cable having a number of sensors along its length according to one preferred embodiment of the present invention.

FIG. 3 shows a schematic diagram of a producing well wherein a fiber optic cable with sensors is utilized to determine the health of downhole devices and to make measurements downhole relating to such devices and other downhole parameters.

FIG. 4 is a schematic illustration of a wellbore system wherein a permanently installed electrically-operated device is operated by a fiber optic based system.

FIG. 5 is a schematic representation of an injection well illustrating a plurality of sensors mounted therein.

FIG. 6 is a schematic representation illustrating both an injection well and a production well having sensors and a flood front running between the wells.

FIG. 7 is a schematic representation similar to **FIG. 6** but illustrating fluid loss through unintended fracturing.

FIG. 8 is a schematic representation of an injection production well system where the wells are located on either side of a fault.

FIG. 9 is a schematic illustration of a chemical injection monitoring and control system utilizing a distributed sensor arrangement and downhole chemical monitoring sensor system in accordance with the present invention.

FIG. 10 is a schematic illustration of a fiber optic sensor system for monitoring chemical properties of produced fluids.

FIG. 11 is a schematic illustration of a fiber optic sol gel indicator probe for use with the sensor system of **FIG. 10**.

FIG. 12 is a schematic illustration of a surface treatment system in accordance with the present invention.

FIG. 13 is a schematic of a control and monitoring system for the surface treatment system of **FIG. 12**.

FIG. 14 is a schematic illustration of a wellbore system wherein electric power is generated downhole utilizing a light cell for use in operating sensors and devices downhole.

FIGS. 15 and 15A-15C show the power section of fiber optic devices for use in the system of **FIG. 1**.

FIG. 16 is a schematic illustration of a wellbore with a completion string having a fiber optic energy generation device for operating a series of devices downhole.

FIGS. 17A - 17C show certain configurations for utilizing the fiber optic devices to produce the desired energy.